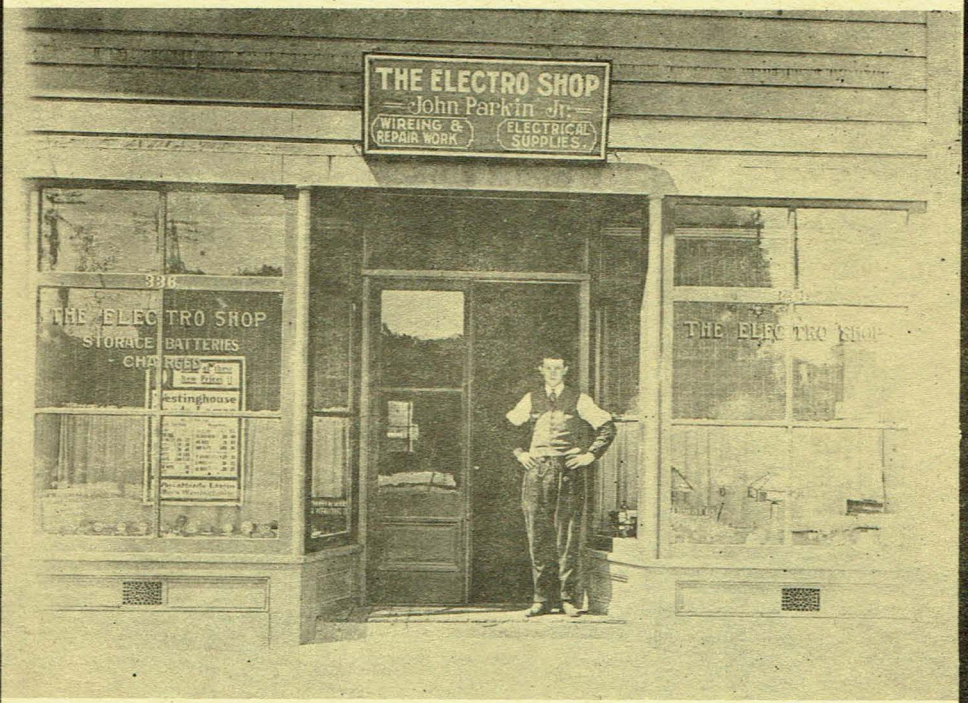
OFFICIAL JOURNAL

VOL. I MARCH 1976 NO. 3

CALIFORNIA HISTORICAL RADIO SOCIETY



JOHN PARKIN JR. (IN 1914)

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HISTORICAL RADIO SOCIETY
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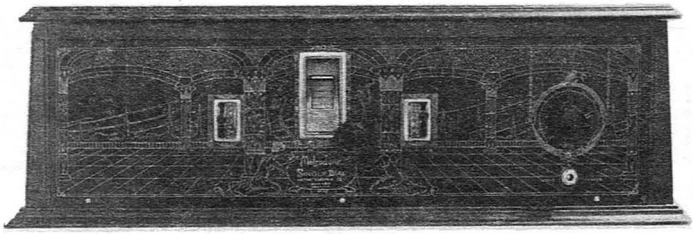
For membership correspondence address the Treasurer, James Cirner, 13366 Pastel Lane, Mt. View, CA. 94040. Articles and non-commercial ads for the journal should be submitted to the Editor, Kenneth Miller, 1950 Cooley Avenue, Palo Alto, CA. Historical data for copying or donation should be sent to the Historian, Larry LaDuc, Jr., 484 Arleta Avenue, San Jose, CA. 95128.

THE SOCIETY

The California Historical Radio Society is a non-profit corporation chartered in the state of California, and was formed to promote the interests of California vintage and antique radio enthusiasts. Our goal is to provide the opportunity to exchange ideas and information on the history of radio (in California especially.) We hope to be of service to those interested in such areas as collecting of equipment, literature, and programs, etc., and restoration of early gear. Regular meetings and swap meets are scheduled in the San Jose area, with additional meets planned for Southern California in the future. We now have 70 members from throughout the state (and a few from out of state.) As we grow so do the benefits to our members. Tell your friends about us!

THE JOURNAL

The Official Journal of the California Historical Radio Society is published quarterly and is furnished free to members. Our first issue was published in September 1975 and copies are still available to new members. Articles for the Journal are solicited from all members. Any items of interest, such as restoration hints, information on early radio broadcasts and personalities, anecdotes about the pioneers, etc., will be gratefully accepted. Anyone interested in editing a section of the magazine on a regular basis should contact the editor. This can relieve our editor of a great deal of work and insure maximum attention to your area of particular interest.

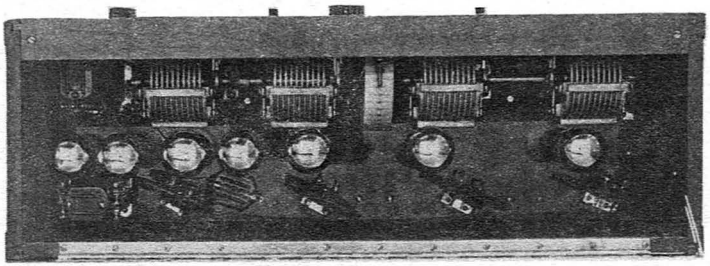


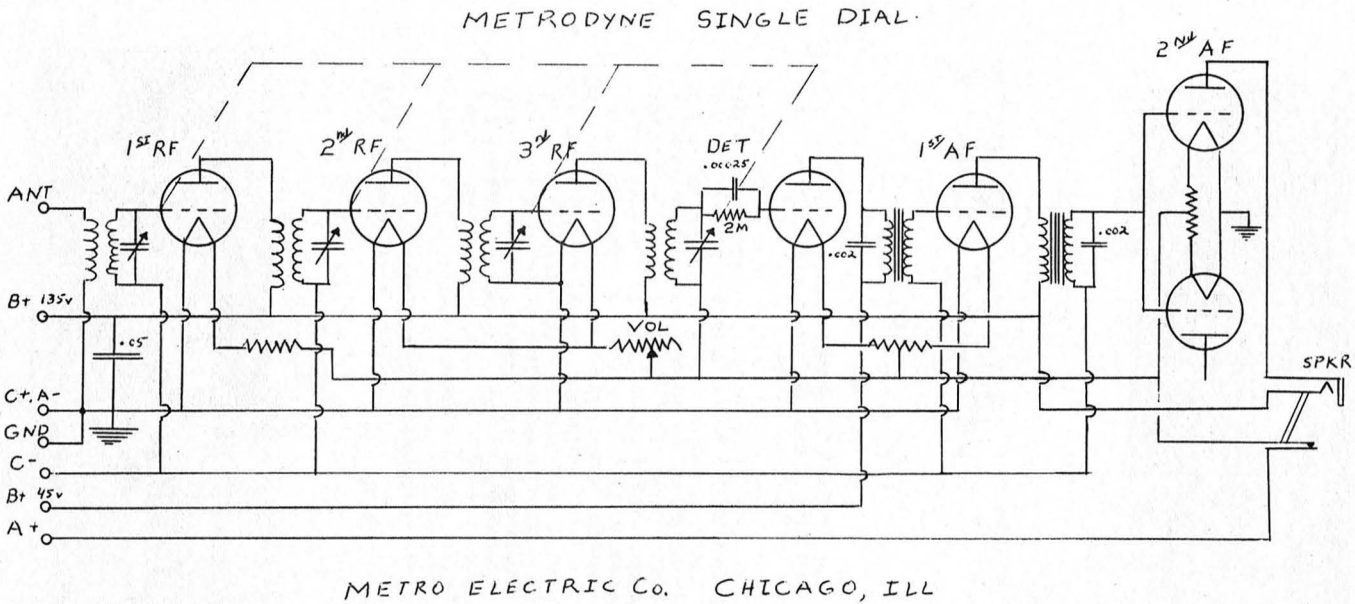
FEATURED SET

METRODYNE SINGLE DIAL

BY PETER BRICKEY

I do not have many of the TRF broadcast recievers in my collection as I try to collect the more unusual types of these sets. The Metrodyne 7-tube set being one of these.
The Metro Electric Company of Chicago, Ill. manafactured radios from 1923 to 1929. The 7-tube Metrodyne was introduced in 1926 and originally sold for $75.00. This set was produced for two years and there were two models, each distinguished by the type of front panel, one having the guilded panel and the other having a wood-grained front panel. The set is unique in the fact that it is a single dial which drives an aluminum four-gang tuning condenser. The rotors being connected to a worm drive and the stators are also moveable being connected to the levers on either side of the tuning dial. The stators of the first RF stage are connected to the Left-hand lever and the stators for the third RF stage and the Detector are connected to the Right-hand lever. These levers allowed one to 'fine tune' the set to a particular station. The other unusual features included two 201A tubes connected in parallel as the final audio stage and the OFF-ON switch being incorporated in the speaker jack - plug the speaker in and the set turns on.
The set is beautifully finished with the front panel being guilded with a Grecian design and all the exposed hardware is gold plated.





NOTE: A mistake has been pointed out in last month's Uncle Al's Magic Voice receiver schematic. A line was inadverdently drawn from the bottom of the second tuning capacitor to B+, thus shorting the B+ to ground. This line should be removed.

RESTORATION HINTS

NICKLE PLATING

BY JIM CIRNER

The purpose of this article is to explain how to make an inexpensive nickel plating system for copper and brass parts for around $150.00 investment. The materials purchased will last for many years and will allow you to plate thousands of small parts. A tank is not required because nickel is applied with a stylus in much the manner of painting with a brush. Another name for this system is brush plating. It can also be used for plating steel and aluminum, filling up cracks (as in pot metal), and stripping old plating chemically from parts. Maybe in some future article these other uses can be covered, if there is enough interest.

MATERIALS REQUIRED

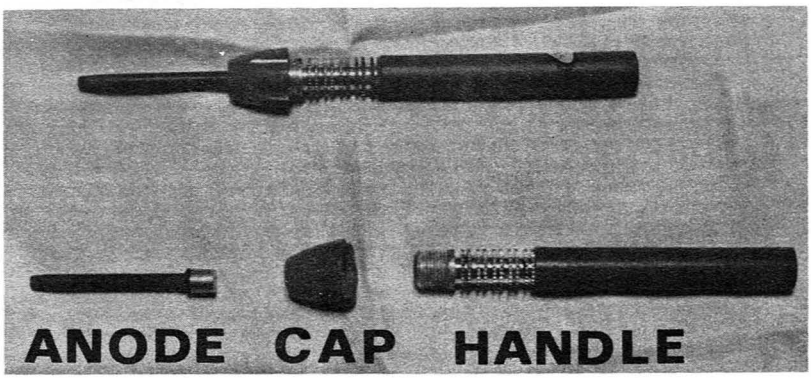
1. Variable DC Power Supply unregulated 0-10v DC, 6 amp. Must have amp and volt meter.
2. Cotton, surgical grade long fiber. May be purchased at drugstore.

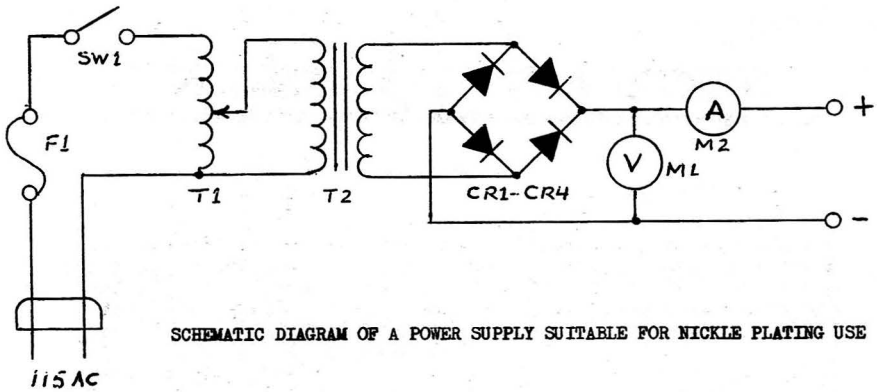
This following group of items will have to be purchased from VANGUARD PACIFIC, INC.:

3. Two handles type A standard - $14.50 ea.
4. Minimum of two anodes for handles, part no. MS-2, 3" long x ½" diam. - $2.50 ea.
5. Two caps to hold anodes on handles, size #2 - $2.95 ea.

SOLUTIONS

6. Electro clean no. SCM4100 - $14.25 qt.
7. Nickel Special (will build up to .0002" max.) no. SPS5630 Shines up well. - $36.50 qt.
8. Optional Nickel Acid High-Build, no. SPS5640 - $28.00 qt.





SCHEMATIC DIAGRAM OF A POWER SUPPLY SUITABLE FOR NICKLE PLATING USE

PARTS LIST:

F1 - Fuse, 1 Amp

SW1 - Switch, toggle

T1 - Autotransformer, 115 Volt, 3 Amp; General Radio W2, Superior 10B, Staco 251, or G.E. 9T92A1.

T2 - Transformer, 10 or 12.6 Volt, 10 Amp; Triad F-35U, Stancor P8644, or Allied 6K123VG

CR1-CR4 - Diodes, 10 Amp, 50 PIV; G.E. 1N1200 is a good bet (12 Amp, 100 PIV)

M1 - Voltmeter, D.C., 0-10 Volts

M2 - Ammeter, D.C., 0-10 Amps

PROCEDURE NECESSARY TO GET PARTS READY TO BE PLATED

1. Soak all parts in a full concentration of household ammonia for a few minutes. This will remove most of dirt corrosion. Often parts clean up so well that they don't require re-nickeling, just a little polishing.
2. Purchase, if you don't have one, a 6" cloth buffer wheel, cutting and polishing compounds. These materials may be purchased at Sear's or Ward's. I mounted my buffer wheel on an old washing machine motor 1/3 horse, 1750 rpm. Polish all parts to be plated with buffer wheel, using polishing compounds. If nickel pieces have brass showing it is advisable to use cutting compound and remove the old nickel. It will work either way, but will give you a more even effect. For small areas like you would find on the sides of terminal nuts like on a Radiola 3, you need a Dremel Motor tool kit. For those who are not familiar with this kit, they are very popular with model airplane enthusiasts. It comes with various

cutters, saws, sanding and buffing attachments, etc. They are sold at most hardwares, Sear's and Ward's tool departments. The buffer attachment wheel is $\frac{3}{4}$" diam. x $\frac{1}{4}$" thick allowing you to polish difficult areas. On flat pieces like the wavelength link on a Radiola 3 the plating should be removed down to the brass. The brass should be well polished (rule of thumb). The better you buff a piece, the shinier it will look when plated.

3. After parts are polished, clean thoroughly. Use cleaning solvents, alcohol, soap and water, etc. Old toothbrushes work well for cleaning crevices on terminal nuts, etc.

PROCEDURE FOR PLATING

1. Insert anodes through caps and screw caps onto handles.
2. Wrap one inch of anode with cotton. Cotton thickness should range from 1/8" to 3/16". Wrap a small rubber band on bottom of cotton to hold it onto the anode.
3. Pour Electro clean into a small glass dish approximately 3" diam. x 1" deep.
4. Pour Nickel Special or Nickel Acid High-Build solution into a glass dish about the size of the one used for the Electro clean.
5. Put each cotton wrapped anode into one of the dishes to allow solution to soak up in cotton. Cotton must be thoroughly soaked in order to pass electrical current.
6. Prepare a large dish with clean water in it for rinsing parts.
7. Connect the (+) lead of your power supply to the Electro clean handle. This lead will require a single male banana plug to plug into the handle.
8. Connect the (-) lead of power supply to piece to be cleaned and plated. This is called the cathode lead. I use an alligator clip on this lead.
9. Make sure power supply DC control is turned down to zero. Now turn on AC to supply. Adjust DC voltage for around 4 to 6 volts.
10. Rub Electro clean solution on part starting out with around 4 VDC. You should observe a foaming of solution on part if you have enough voltage. If no foaming action, increase voltage a little. Don't forget to connect (-) cathode lead to part. Otherwise nothing will happen. Thoroughly cover all surfaces of part being cleaned. This removes all hand grease residual materials and oxidation not removed when you originally cleaned and buffed. At this point you do not touch part until plated. Use a pair of clean tweezers or long-nose pliers. I leave the part connected to the alligator clip and hold it by the clip as much as possible. You will notice a drop in the voltage and a varying current on amp meter. This is normal.
11. Leave power supply on and dip part in clean rinse water. If part is properly electrocleaned it will be evenly coated with water when removed from rinse dish. If water breaks occur, repeat the electrocleaning process. This must be done or the part will not plate properly. You have only two minutes to move onto the next step because air will re-oxidize the part.
12. Disconnect Electroclean handle from power supply leaving anode soaking in electroclean. Now connect (+) lead to nickel solution anode. Start wiping on the nickel. Always keep cotton saturated with solution. Since we are only interested in cosmetic appearances stop wiping when

Continued on next page

Continued from last page

the whole part looks nickeled. In the case of Nickel Acid High-Build the nickel will keep getting thicker the longer you wipe. Try to wipe even so to have even build-up. Nickel Special will only build up to .0002" regardless of how long you wipe. If nickel is not going on, increase voltage. Make sure you are electrically connected. Volt meter should show decreasing v and amp meter should show increasing current. If nickel starts to get dark, increase the speed of wiping motion or decrease voltage a little. You will have to experiment until you have the optimum voltage, current and anode movement for best results.

13. This completes the first part. Now repeat process for each part until all parts are plated.
14. Shut off power supply. Remove cotton from both anodes, clean anodes and handles thoroughly with water.
15. All parts you just completed plating will require a small amount of polishing. I use a polish named Wenol Metal Polish. I do not know where it can be purchased because it was given to me. What is important is that it is a very fine grit metal polish because you don't want to remove too much of the nickel you just added. In the case of Nickel Special which is only .0002" thick be extra careful not to rub too much or you will go through to the base metal.

VERY IMPORTANT

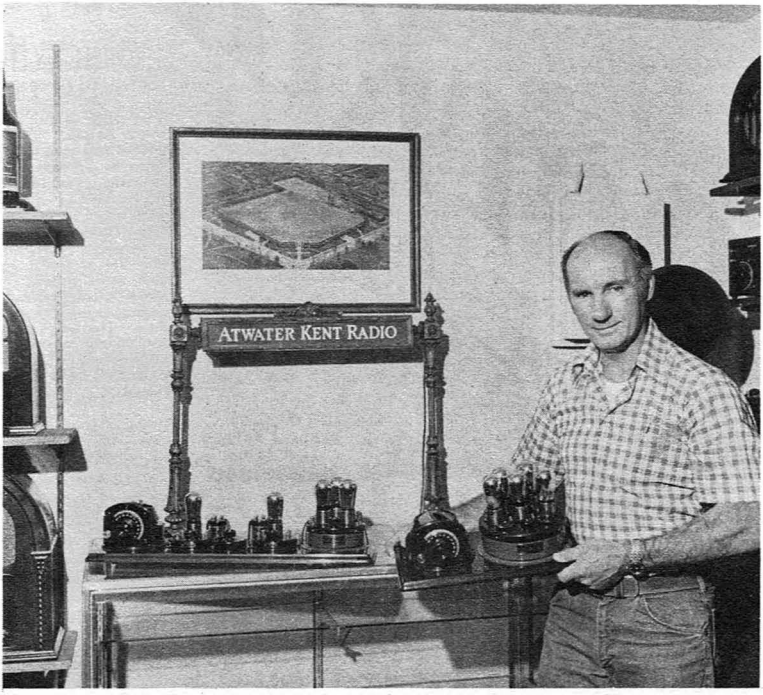
16. Do not mix up the two carbon anodes. Mark each anode for what solution it was used for. They cannot be mixed up. Also use same handle for same solution. Mixing anodes up will cause contamination of future parts plated.
17. Example: If you used a carbon anode previously used for nickel to electro clean, you would notice nickel being deposited on part while electro cleaning. You cannot get an anode perfectly clean when you wash it. Some nickel will remain impregnated in anode.
18. Do not attempt to use another carbon material you might have laying around for an anode. This carbon used is a special ultra pure carbon. As you use the anode over and over again you will notice a pitting on carbon. This is normal and will not hurt anything. Occasionally you might want to sand the anodes smooth.

Electro clean solution and nickel will get dirty when being used. This is carbon coming out of the anode and depositing in the solution. Also cotton will gradually get black. This will not hurt anything. If you want to clean dirty solution, use filter paper such as used in a drip coffee pot.

Solution handles and electrodes, etc. may be purchased at:
VANGUARD PACIFIC, INC.
1655 Ninth Street, Santa Monica, Ca. 90404
phone: (213) 451-1749
(or)
808 San Antonio Rd., Palo Alto, Ca.
phone: (415) 494-8220

I realize this is a long involved article. Possibly I did not make every point crystal clear. If you have any questions, write or call me - James Cirner, 13366 Pastel Lane, Mt. View, Ca. 94040, phone: (415) 967-7672.

COLLECTOR SPOTLIGHT



MEL PRATER

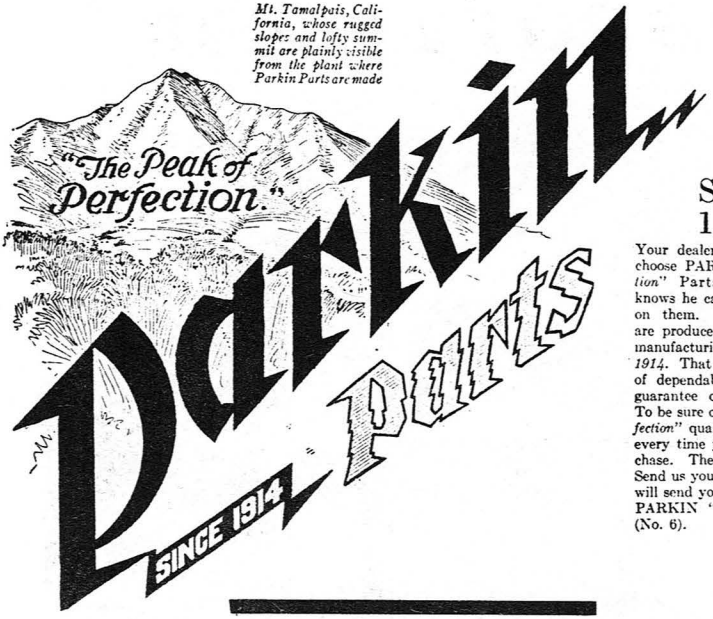
Although a new member in the hobby of collecting "Vintage Radios", my interest in radio started with the construction of a one tube regenative set in 1942.

During the past three and a half years I have been most fortunate to have located a number of sets chat make my collection of interest.

I prefer early Atwater Kent sets when I can find them, but have a number of various other makes such as a Federal #59 - Collin B. Kennedy XV - Erla Reflex - Gilfillan GN-2 - Crosely V - etc.

My collection is not limited to battery sets as there are several electrics and crystal sets too. Also included are service manuals, owners manuals, advertizing signs, and related radio books.

Collecting vintage radios and their restoration is a great hobby, but the opportunity to meet the many people that share it as a common interest has been most enjoyable.



SINCE
1914

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The Parkin Mfg., Co., of San Rafael, CA 1914-1926
By Joe Horvath of San Rafael, CA

It is only fitting that the story of the Parkin Mfg. Co., be recorded and told by one who lives in San Rafael and personally knew the late John Parkin Jr. (all of his friends called him Jack).

In 1914 Jack Parkin went into the electrical business in the city of San Rafael at 336 Fourth Street, the business' name was "The Electro Shop". Here is actually where the Parkin Mfg. Co. got it's original start when Jack manufactured miniature sounders and sold them by the hundred to amateur Morse Code operators to help them learn the code.

Shortly afterwards Jack Parkin went to work for Haller & Cunningham. This was way before Elmer Cunningham became associated with the Remler Company of San Francisco. Here is where Jack learned all about the manufacture of radio parts, especially he learned the art of molding Bakelite parts, this later showed up in the high quality of the Parkin Bakelite parts.

So after Jack served his country well in the U.S. Signal Corp in WWI, he started to organize the Parkin Mfg. Co. A fully-equipped shop was one of the first necessities, which meant a tool and die maker was hired to make all of the dies for the Bakelite molds and the punch presses for the punching out of the metal parts. They manufactured all of their hardware, and had special machines for threading nuts and machine screws.

At first it was only the family who worked in the shop but business grew by leaps and bounds in the new industry. By 1920 the business grew to such an extent that there were a total of twenty-two employees working around the clock. This was an efficient way to run the Bakelite molds as they had to be kept hot at all times during the molding process. At the peak of their operation they were manufacturing and marketing over forty-five different products.

Parkin Mfg. Co. was primarily a manufacturer of parts for sets builders but they also manufactured and marketed several different models of receivers during their existence. The type D, Type 100, Type 105 and the very popular Parkin Crystal Set. They also manufactured other sets but at this time they are unidentified.

The most popular item of all was the #31 Parkin Audion Panel. This unique detector unit would accomodate either a UV based De Forest bulb or the more popular Audiotron with the Pigtail terminals. It was a much neater looking audion panel then most of those on the market because the UV tube receptical is flush with the panel, actually when the audiotron is in place the UV receptical is hidden from sight.

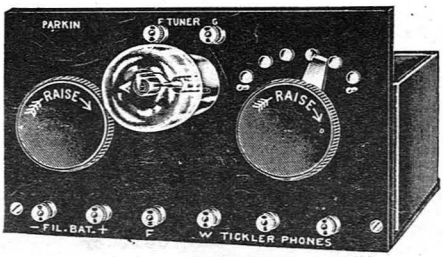
Later they also manufactured a direct reading channel dial for Atwater-Kent receivers, but these dials are also dandy for any receiver.

Besides being a manufacturer, Jack Parkin was also an inventor. He invented the #52 Mercury variable condenser, patented October 24,1922, the #35 Parkin knob type rheostat patented March 30, 1920, the #100 dial type rheostat patented August, 1922.

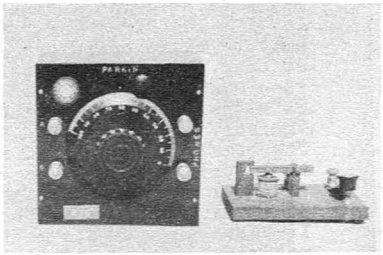
Jack Parkin sold the patent rights to the Mercury variable condenser to RCA for $500.00, and it was later manufactured by the Wireless Specialty Apparatus Co. for RCA as their model UC-1819 variable condenser.

The best years for the business were the years of 1922-23-24, but by 1925 the competition from the big companies was getting too tough and by 1926 so many of the Parkin Mfg. Co. customers were going bankrupt that the Parkins were forced to close down the manufacturing business for good, though for several years they continued in the radio retail trade as Atwater-Kent Crosley and Majestic dealers, and in a few years that also was given up and a famous name left the radio field for good, but was not forgotten.

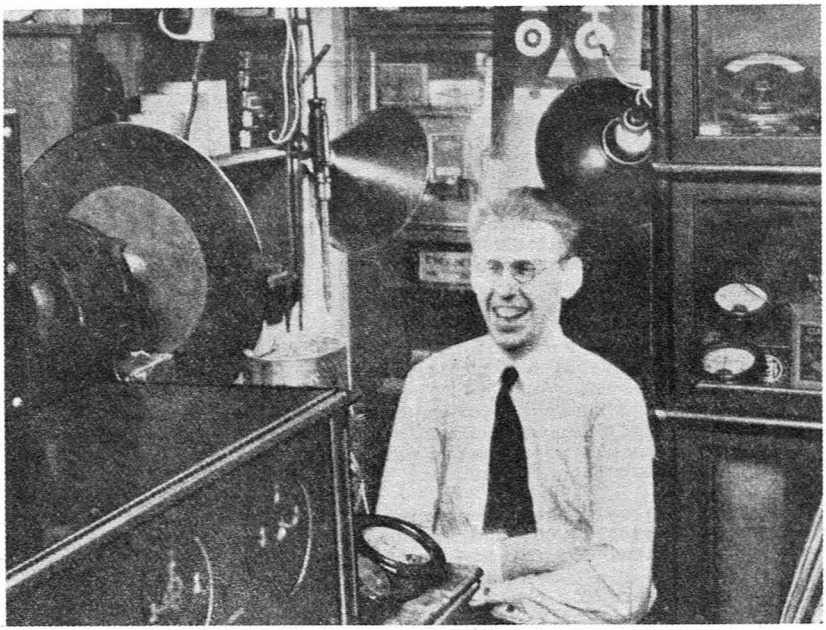
PARKIN AUDION PANEL



DIRECTLY ABOVE IS THE PARKIN AUDION PANEL SHOWING A UV BASED TUBE IN PLACE. WHEN USING A TUBULAR AUDIOTRON TUBE SIMPLY CONNECT AS FOLLOWS: G--GRID, W--WING OR PLATE, BOTTOM F IS POSITIVE AND THE TOP F IS NEGATIVE. THE UNIT ALSO COMES IN A CABINET VERSION IN WHICH THE SAME CHASSIS SLIPS INTO A NICE SOLID WOOD MAHOGANY CASE.



ABOVE IS THE PARKIN CRYSTAL SET. THE CASE IS MADE OF MAHOGANY AND MEASURES $4\frac{1}{2}X4\frac{1}{2}X2\frac{1}{2}$ INCHES. THE CATWHISKER CONTROL IS ABOVE THE DIAL. DIRECTLY BEHIND THE DIAL IS THE COIL WITH THE TUNING CONDENSER INSIDE. ALSO SHOWN ABOVE IS THE PARKIN MINIATURE SOUNDER. ITS SMALL SIZE CAN BE SEEN IN COMPARISON WITH THE CRYSTAL SET.



By Kenneth W. Miller

Many people are surprised to learn that the concept and even the term "television" date back to the 1920's. A number of early experimenters were involved in the initial experiments in the mid 1920's, including such names as Baird in England, Belin in France, and Francis Jenkins in this country (who may have been the first to send moving pictures by radio.) Jenkins and Hiram Percival Maxim issued the challenge to amateur radio operators of that time to develop the fledgling science. By 1928 amateurs such as Boyd Phelps of Connecticut (see Radio Broadcast for February 1929) were claiming success with the mechanical scanning process described in this article. The photo above shows a subject posing for Phelp's televisor. The heart of the system was the mechanical scanning disc shown in Figure 1. As can be seen holes were drilled in the disc in a spiral pattern such that if a portion of the disc were blocked off a picture would be scanned similar to modern television. It was then a simple matter to place a photo-electric cell or neon lamp behind the disc to respectively detect or recreate the visual image. Figure 2 shows a simple system described in Popular Radio and Television for May 1928, used to transmit photographic negatives and figures drawn on glass slides. Of course the system was not without its problems: synchronization and noise (due to the low sensitivity of the photoelectric cell) being two of the worst. And of course the subjects who were baked under the necessary high intensity lights would be quick to point out their discomfort.

The author is very interested in duplicating some of these early experiments. Anyone interested in joining these efforts or who has leads on any of the parts required (early photo-electric cells, neon lamps, motors, etc.) please contact me at 1950 Cooley Avenue, #6204, Palo Alto, CA. 94303. Literature on the details of construction is also eagerly solicited.

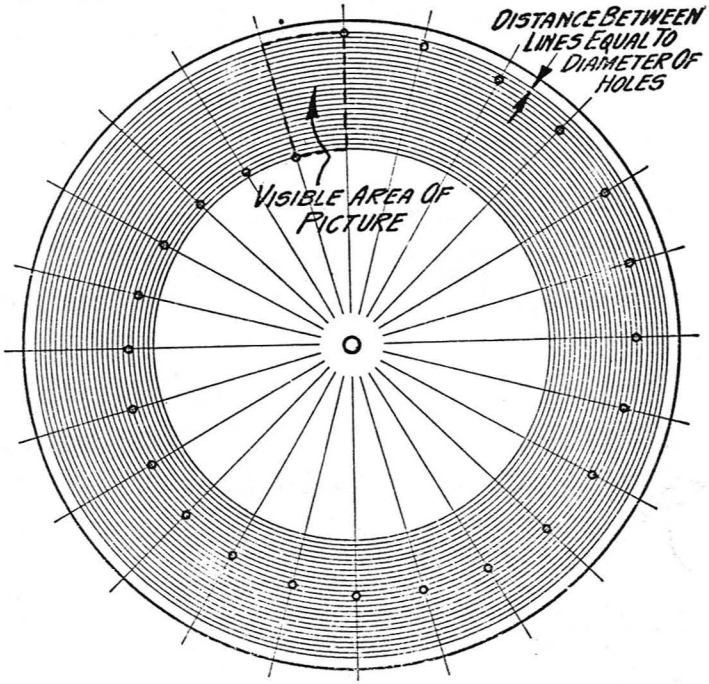
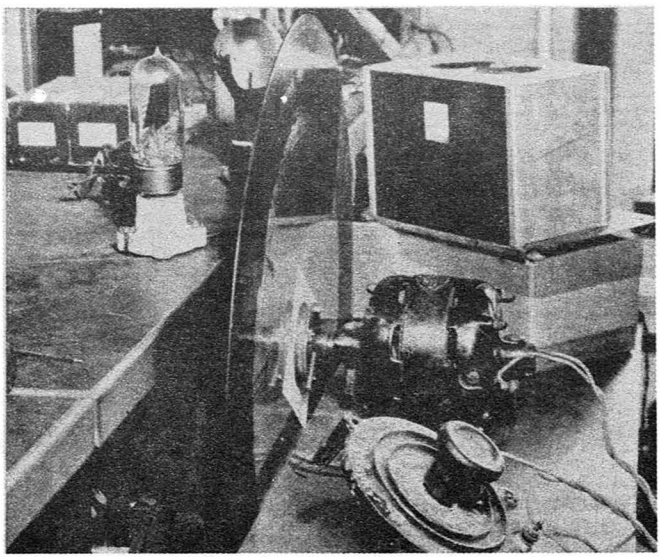


FIGURE 1. The Disc Layout

The picture area is represented by the dashed lines. As the disc spins the holes drilled in the disc pass through this area and the picture is scanned. To make the picture as square as possible the disc should be large and the holes should be near the edge.



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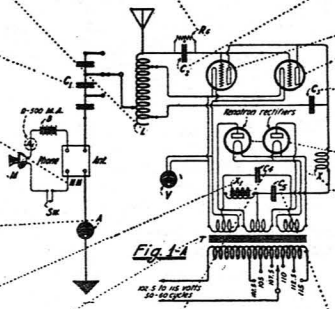

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Radio Corporation of America

233 BROADWAY—NEW YORK CITY

The Collector's Ads

WANTED: Early crystal sets, unusual instruments, early television scanners. Ken Miller, 1950 Cooley Avenue, Apt. #6204, Palo Alto, CA. 94303.

WANTED: Early wire recording literature, items. Will buy or trade wireless lit., H. Layer, AV-San Francisco State University, 1600 Holloway, San Francisco, CA. 94132.

WANTED: Horn type speaker working or not for my AK-5A radio. State condition and price. Ed Tilton, 2414 Southview Dr., Alamo, CA. 94507.

A number of items available. Send stamped and self-addressed envelope for list. Paul Giganti, 2429 San Carlos Ave., San Carlos, CA. 94070, phone: (415) 593-4723.

WANTED: RCA Radiola 28 chassis and loop only. I have the case. Must be in near mint condition in appearance. Write Norman Berge, 1275 Quincy Drive, San Jose, CA. 95132.

FOR SALE: Three National FB-7 coils, one osc. 14.0-14.4mc. and two Det. same frequency. Hammarlund Comet Pro coils for sale: Pair of AA--15-31 meters, one coil form has a broken piece missing on top of the coil form. Pair of BB--28-61 meters, one coil form has chipped places on bottom form. Pair of DD--115-250 meters, one has a repaired place on coil form. The rest of the coils are in good shape, all of the coils work as they should. The price is $20.00 for all six coils plus $3.00 for shipping. W6GPB WIRELESS MEMORIAL MUSEUM, Joseph Horvath, 522-Third St., San Rafael, CA. 94901.

I have a set I'm trying to find a home for. It's a custom built RCA, installed in a private home bar in Portland about 1950. It's all chrome, similar to a Scott, but a two piece chassis. It has about 36 tubes, AM, FM, TV sound, 6 SW bands. Electric tuning, treble base, VU's. About 14 were made at $4,000.00 each. Bill Butterfield, 3222 Silverman Dr., Napa, CA. 94558.

WANT ADS ARE FREE TO ALL MEMBERS OF THE CALIFORNIA HISTORICAL RADIO SOCIETY. SUBMIT ADS TO THE EDITOR, KENNETH W. MILLER 1950 COOLEY, APARTMENT 6204, PALO ALTO, CA 94303. DUE TO THE NON-PROFIT STATUS OF OUR SOCIETY, WE CANNOT ACCEPT ADS OF A COMMERCIAL NATURE.

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Demonstrations Daily
Afternoons and Up to 10 P. M.
Sundays 7 to 10 P. M.

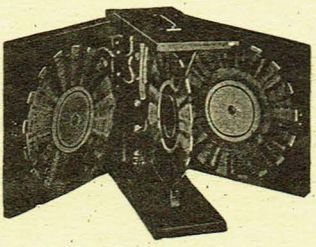
Manufactured and Sold Exclusively by

UNCLE AL'S RADIO SHOP

3153 E. 27th St., Oakland
One Block East of Fruitvale Ave.
Phone Fruitvale 6663

SAN FRANCISCO BRANCH
F. J. Wheeler, 1009 Castro Street

SPIDER WEBS



Cut Shows Front Panel Removed

WONDERFUL REGENERATIVE SIGNALS

NO MAGNETIC LEAKAGE

$5.50 Plus 30c Postage

Exclusive Westinghouse Agents for our Territory

NEW DUPLEX 1000 METER SET ON HAND

HERROLD LABORATORIES

"Everything for the Amateur"

467 SOUTH FIRST STREET SAN JOSE, CALIF.

30 DAYS FREE TRIAL

7 Tube Set
Single Dial Radio

The Metrodyne
ONLY ONE DIAL TO TUNE

Retail Price
$75
Completely Assembled
Big Discounts to Agents and Dealers

Wonderful offer direct from the factory!

A perfect working, single dial control, 7 tube receiver. And just to prove our claims, we will ship it to your home for **30 days' free trial.** Test it under all conditions. Test it for distance, volume and tonal quality — and if you are not convinced that it is the best single dial set you ever heard, return it to the factory. We don't want your money unless you are completely satisfied.

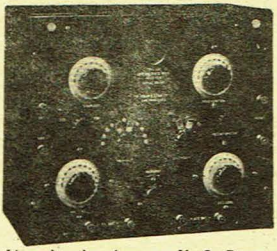
BIG PROFITS TO AGENTS AND DEALERS

Our Agents and Dealers make big money selling Metrodyne Sets. You can work all or part time. Demonstrate the superiority of Metrodynes right in your home. Metrodyne Radios have no competition. Lowest wholesale prices. Demonstrating set on 30 days' free trial. Greatest money-making opportunity. Send coupon below—or a letter—for our agent's proposition.

Metrodyne Super-Seven Radio

A single dial control, 7 tube, tuned radio frequency set. Approved by America's leading radio engineers. Designed and built by radio experts. Only the highest quality low loss parts are used. Magnificent, two-tone walnut cabinet. Artistically gilded genuine Bakelite panel, nickeled piano hinge and cover support. All exposed metal parts are beautifully finished in 24-k gold.

Easiest set to operate. Only one small knob tunes in all stations. The dial is electrically lighted so that you can log stations in the dark. The volume control regulates the reception from a faint whisper to thunderous volume, 1,000 to 3,000 miles on loud speaker! The Metrodyne Super-Seven is a beautiful and efficient receiver, and we are so sure that you will be delighted with it, that we make this liberal **30 days' free trial offer.** You to be the judge.



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KENNEDY EQUIPMENT

Announcing
the new

KENNEDY INTERMEDIATE WAVE REGENERATIVE RECEIVER
TYPE 220
RANGE 175 TO 3250 METERS

Detects, regenerates or oscillates as desired at any point in its range

This new receiver fully sustains the reputation for high quality which Kennedy apparatus has established. We believe there is no other receiver on the market which displays such concentrated quality value in design, workmanship, finish and performance as is embodied here.

You will be interested to know more about this new unit. Ask your dealer to show it to you. If he has none in stock, we will gladly send you Bulletin 201 on request.

THE COLIN B. KENNEDY COMPANY
INCORPORATED

RIALTO BUILDING SAN FRANCISCO